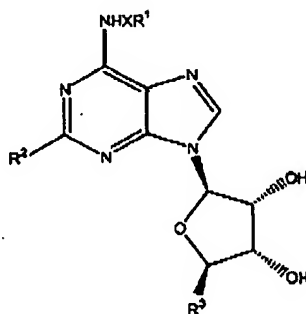


Response to May 16, 2006 Office Action  
Serial No. 10/722,702  
CVT No. 01-157-CIP

APPENDIX ACLEAN COPY OF THE CLAIMS

RECEIVED  
CENTRAL FAX CENTER  
SEP 14 2006

1. A compound of the formula:



Formula 1

wherein:

R<sup>1</sup> is lower alkyl of 1-6 carbon atoms, cycloalkyl of 3-6 carbon atoms, or phenyl optionally substituted by halo;

X is a covalent bond or alkylene of 1-3 carbon atoms;

R<sup>2</sup> is R<sup>4</sup>-Z-Y-C≡C- in which Y is alkylene of 1-3 carbon atoms, Z is oxygen, sulfur or -NH-, and R<sup>4</sup> is phenyl optionally substituted by halo or lower alkoxy; or

R<sup>2</sup> is pyrazolyl optionally substituted by phenyl or benzyl, which are optionally substituted by halo, lower alkyl, or lower alkoxy, or;

R<sup>2</sup> is pyrazolyl substituted by (lower alkyl)-O-C(O)-, -C(O)NH<sub>2</sub>, -C(O)NH-(lower alkyl), cycloalkyl of 3-6 carbon atoms, pyrimidinyl, pyridinyl, benzoxazolyl, quinazolyl, isoquinazolyl, or pyrazolyl, said pyrimidinyl, pyridinyl, benzoxazolyl, quinazolyl, isoquinazolyl, or pyrazolyl all of which are optionally substituted by 1, 2 or 3 lower alkyl groups; and

R<sup>3</sup> is hydroxymethyl or -C(O)-NR<sup>5</sup>R<sup>6</sup>;

in which R<sup>5</sup> and R<sup>6</sup> are independently hydrogen or lower alkyl.

2. The compound of claim 1, wherein R<sup>2</sup> is pyrazol-1-yl substituted by phenyl, which is optionally substituted by halo, lower alkyl, or lower alkoxy.

Response to May 16, 2006 Office Action  
Serial No. 10/722,702  
CVT No. 01-157-CIP

3. The compound of claim 2, wherein  $R^1$  is lower alkyl of 1-6 carbon atoms or phenyl optionally substituted by halo, and  $R^3$  is hydroxymethyl.
4. (canceled)
5. (canceled)
6. The compound of claim 3, wherein  $R^1$  is lower alkyl of 1-6 carbon atoms and X is a covalent bond.
7. The compound of claim 6, wherein  $R^1$  is methyl and  $R^2$  is 4-(4-methoxyphenyl)pyrazol-1-yl, namely (4S,2R,3R,5R)-5-(hydroxymethyl)-2-{2-[4-(4-methoxyphenyl)pyrazolyl]-6-(methylamino)purin-9-yl}oxolane-3,4-diol.
8. The compound of claim 6, wherein  $R^1$  is n-propyl and  $R^2$  is 4-(4-methoxyphenyl)pyrazol-1-yl, namely (4S,2R,3R,5R)-5-(hydroxymethyl)-2-{2-[4-(4-methoxyphenyl)pyrazolyl]-6-(n-propylamino)purin-9-yl}oxolane-3,4-diol.
9. The compound of claim 6, wherein  $R^1$  is methyl and  $R^2$  is 4-(4-chlorobenzylaminocarbonyl)pyrazol-1-yl, namely (1-{9-[(4S,2R,3R,5R)-3,4-dihydroxy-5-(hydroxymethyl)oxolan-2-yl]-6-(methylamino)purin-2-yl}pyrazol-4-yl)-N-(4-chlorophenyl)carboxamide.
10. The compound of claim 6, wherein  $R^1$  is methyl and  $R^2$  is 4-(4-chlorobenzylaminocarbonyl)pyrazol-1-yl, namely (1-{9-[(4S,2R,3R,5R)-3,4-dihydroxy-5-(hydroxymethyl)oxolan-2-yl]-6-(methylamino)purin-2-yl}pyrazol-4-yl)-N-(4-chlorophenyl)carboxamide.

Response to May 16, 2006 Office Action  
Serial No. 10/722,702  
CVT No. 01-157-CIP

11. The compound of claim 1, wherein  $R^1$  is lower alkyl of 1-6 carbon atoms,  $R^2$  is pyrazo-1-yl substituted by (lower alkyl)-O-C(O)-, -C(O)NH<sub>2</sub>, -C(O)NH-(lower alkyl), cycloalkyl of 3-6 carbon atoms, pyrimidinyl, pyridinyl, benzoxazolyl, quinazolyl, isoquinazolyl, or pyrazolyl, said pyrimidinyl, pyridinyl, benzoxazolyl, quinazolyl, isoquinazolyl, and pyrazolyl being optionally substituted by 1, 2 or 3 lower alkyl groups,  $R^3$  is hydroxymethyl, and X is a covalent bond.
12. The compound of claim 11, wherein  $R^1$  is n-propyl and  $R^2$  is 4-(pyrid-2-yl)pyrazol-1-yl, namely (4S,2R,3R,5R)-5-(hydroxymethyl)-2-[4-(pyridin-2-yl)pyrazolyl]-6-(n-propylamino)purin-9-yl}oxolane-3,4-diol.
13. The compound of claim 5, wherein  $R^1$  is phenyl optionally substituted by halo and X is methylene.
14. The compound of claim 13, wherein  $R^1$  is 3-iodophenyl and  $R^2$  is 4-(4-methoxyphenyl)pyrazol-1-yl, namely (4S,2R,3R,5R)-5-(hydroxymethyl)-2-{2-[4-(4-methoxyphenyl)pyrazolyl]-6-(3-iodobenzylamino)purin-9-yl}oxolane-3,4-diol.
15. The compound of claim 1, wherein  $R^2$  is pyrazol-4-yl optionally substituted by benzyl.
16. The compound of claim 15, wherein  $R^1$  is lower alkyl of 1-6 carbon atoms and  $R^3$  is hydroxymethyl.
17. The compound of claim 16, wherein  $R^1$  is methyl,  $R^2$  is 1-benzylpyrazol-4-yl,  $R^3$  is hydroxymethyl, and X is a covalent bond, namely (4S,2R,3R,5R)-5-(hydroxymethyl)-2-{2-[1-benzylpyrazolyl]-6-(methylamino)purin-9-yl}oxolane-3,4-diol.
18. The compound of claim 16, wherein  $R^1$  is n-propyl,  $R^2$  is 1-benzylpyrazol-4-yl,  $R^3$  is hydroxymethyl, and X is a covalent bond, namely (4S,2R,3R,5R)-5-

Response to May 16, 2006 Office Action  
Serial No. 10/722,702  
CVT No. 01-157-CIP

(hydroxymethyl)-2-{2-[1-benzylpyrazolyl]-6-(n-propylamino)purin-9-yl}oxolane-3,4-diol.

19. The compound of claim 1, wherein  $R^2$  is  $R^4-Z-Y-C\equiv C-$ .

20. The compound of claim 19, wherein  $R^4$  is phenyl optionally substituted by halo or lower alkoxy,  $R^3$  is hydroxymethyl, and Y is alkylene of 1-3 carbon atoms.

21. The compound of claim 20, wherein  $R^4$  is phenyl optionally substituted by methoxy or chloro, and Y is methylene.

22. The compound of claim 21, wherein  $R^1$  is alkyl of 1-6 carbon atoms, X is a covalent bond.

23. The compound of claim 22, wherein  $R^1$  is methyl,  $R^4$  is phenyl and Z is oxygen, namely 2-hydroxymethyl-5-[6-methylamino-2-(3-phenoxypropyn-1-yl)purin-9-yl]-tetrahydrofuran-3,4-diol.

27. A pharmaceutical composition comprising at least one pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of claim 1.